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## **CLAIMS**

- 1. Process for the manufacture of 1,2-epoxy-3-chloropropane by reaction between allyl chloride and hydrogen peroxide in the presence of a catalyst and in the possible presence of at least one solvent, characterized in that the allyl chloride employed comprises less than 2000 ppm by weight of 1,5-hexadiene.
- 2. Process according to Claim 1, characterized in that the allyl chloride employed comprises less than 1000 ppm by weight of 1,5-hexadiene.
- 3. Process according to Claim 2, characterized in that the allyl chloride employed comprises less than 200 ppm by weight of 1,5-hexadiene.
- 4. Process according to any one of Claims 1 to 3, characterized in that the reaction is carried out at a temperature from 45 to 80°C.
  - 5. Process according to any one of Claims 1 to 4, characterized in that the reaction is carried out at a pH maintained at a value from 3 to 4.5.
- 6. Process according to any one of Claims 1 to 5, characterized in that the amounts of allyl chloride and hydrogen peroxide employed are such that their molar ratio is from 2 to 7.
  - 7. Process according to any one of Claims 1 to 6, characterized in that the solvent comprises methanol.
- 8. Process according to any one of Claims 1 to 7, characterized in that the 20 catalyst comprises TS-1.
  - 9. Process according to any one of Claims 1 to 8, characterized in that the catalyst is present in the form of a fluid bed.
- 10. Process according to any one of Claims 1 to 9, characterized in that the reaction is carried out in a reactor of loop type comprising recirculation of the epoxidation medium.